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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,488	06/25/2003	James P. Reilly	32993-72728	3135
23643	7590	11/17/2004	EXAMINER	
BARNES & THORNBURG			HASHMI, ZIA R	
11 SOUTH MERIDIAN			ART UNIT	
INDIANAPOLIS, IN 46204			PAPER NUMBER	
			2881	

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/603,488	Applicant(s) REILLY ET AL	
	Examiner Zia R. Hashmi	Art Unit 2881	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/16/2003</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-18 are rejected under U.S.C. 103(a) as being unpatentable over Truche et al. (6,707,039), in view of Parker (US 2002/0120404 A1).

3. With respect to independent claims 1, 7 and 13 and dependent claim 11, Truche et al. disclose a method and apparatus of operating a MALDI mass spectrometer, the method comprising the steps of: directing a first laser shot or pulse onto a MALDI sample so as to generate a sample spectrum (Abstract, lines 1-6, col. 2, lines 65-67, col. 3, lines 5-18, col. 13, claim 1, and Fig. 1B), and determining position of a laser to be directed onto the MALDI sample in response to generation of the output signal (col. 3, lines 45-48, col. 6, lines 24-38, and 10a & 10b in Fig. 1B). Their MALDI mass spectrometer (52 in Fig. 1B), comprises: a laser source (Abstract, line 2, col. 3, lines 39-45, and 12a in Fig. 1B), a processing unit electrically coupled to the laser source (50 in Fig. 1B), the processing unit comprising (i) a processor, and (ii) a memory device electrically coupled to the processor, the memory device having stored therein a plurality of instructions which, when executed by the processor, causes the processor

(col. 3, lines 39-48) to operate the laser source to direct a laser onto a MALDI sample so as to generate a sample spectrum (col. 3, lines 13-15), and determine position of laser to be directed onto the MALDI sample in response to generation of the output signal (col. 6, lines 24-38, cols. 13-14, claims 17 & 32).

4. With respect to claims 1-18, Truche et al. fail to disclose a method of summing up the signal intensity of the sample spectrum. Parker, however, discloses method of summing up mass signals, in an application of determining mass signals of a biomolecule fragments (para 0078, lines 1-17, which can be used in establishing a predetermined threshold or criteria (2210 in Fig. 3) for further processing of the data.

It would have been obvious to one having ordinary skill at the time of the invention was made, to combine methods and apparatus of Trouche et al. and Parker, and add features like, performing a survey scan of a MALDI sample so as to generate plurality of sample spectra and an electronic record of it (a well known practice in this art), because Trouche et al. teach (col. 1, lines 13-14) that mass spectrometry is a powerful analytical tool in identifying molecular components.

Conclusion

5. Mordekhay discloses (US 2004/0021071 A1) an apparatus and method for fully automated sample analysis by AP-MALDI mass spectrometry , which performs all functions controlled by a central processing system.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status


Art Unit: 2881

information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact Electronic Business Center (EBC) at 866-217-9197 (toll-free).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zia Hashmi whose telephone number is (571) 272-2473. The examiner can normally be reached between 8.30 AM- 5 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Lee can be reached on (571) 272-2477.

Zia Hashmi

September 30, 2004


JOHN R. LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800